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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Robert W. Cantwell

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EXAMINER

ROBERTS, BRIAN S

ART UNIT

PAPER NUMBER

2419

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/922,412	CANTWELL, ROBERT W.	
	Examiner	Art Unit	
	BRIAN ROBERTS	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 is/are allowed.
- 6) ☒ Claim(s) 1,5,9-17 and 20 is/are rejected.
- 7) ☒ Claim(s) 7,8,18,19,21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Claims 1 and 5-22 remain pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5, 9, 11, 13-14, 17, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsukamoto et al. (US 6498794)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

- In reference to claim 1

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In Figure 1, Tsukamoto et al. teaches a system and method that includes a channel identifier insertion means (2) (*switch*) having a plurality of ports for receiving framed data from a plurality of ports and switching the data to a plurality of ports, each frame of data including a header information, the channel identifier insertion means (2) (*switch*) operable to insert without removing any existing header information a channel identifier which corresponds to a port (*unique port identifier*) into a predefined header field of frames of the data from each port to identify the port from which the data is received (Figure 7-8, column 7 line 66 - column 8 line 49); and a mapping means (4) (*multiplexer*) coupled to the switch (2) and operable to multiplex the data frames from the plurality of ports into a single serial data stream, the multiplexer being operable to multiplex the data from the plurality of ports into a single synchronous payload envelope. (column 5 lines 16-36)

- In reference to claim 5, 14, 20

In Figure 2, Tsukamoto et al. further teaches a subscriber access multiplexer (combination 6 and 8) operable to receive the single serial data stream from the multiplexer (4), demultiplex the serial data stream into data from each port, and route the data based on the channel identifier which corresponds to a port (*unique port identifier*). (column 5 lines 37-55)

- In reference to claim 9

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In Figure 1, Tsukamoto et al. teaches a method that includes receiving framed data from a plurality of ports at, each frame of data including header information; adding a channel identifier which corresponds to a port (*unique port identifier*) to the header information in the frames of data from each port, without removing header information, in order to identify the port from which the data came (Figure 7-8, column 7 line 66 - column 8 line 49); multiplexing the data from the plurality of ports into a single data stream for transmission by synchronous transmission medium. (column 5 lines 16-36)

- In reference to claim 11

In Figure 1, Tsukamoto et al. further teaches multiplexing the data comprises multiplexing the data into a single synchronous payload envelope. (column 5 lines 16-36)

- In reference to claim 13

In Figure 1, Tsukamoto et al. further teaches converting the single serial data stream into SONET optical signals for transmission. (column 5 lines 16-36)

- In reference to claim 17

In Figure 1, Tsukamoto et al. teaches a method that includes receiving framed data from the plurality of ports, each frame of data including header information containing at least destination addresses; adding a channel identifier which corresponds to a port (*unique port identifier*) to a predetermined header

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field of the framed data from each port, without removing any header information, to identify the port from which the data came (Figure 7-8, column 7 line 66 - column 8 line 49); multiplexing the data from the plurality of ports into a single synchronous payload envelope; and converting the multiplexed data into a optical signal for transmission. (column 5 lines 16-36)

Claims 9-10 and 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Dupont. (US 7002976)

- In reference to claim 9

In Figures 10 and 11, Dupont teaches a method that includes receiving framed data from a plurality of ports (76), each frame of data including header information; adding a customer port identifier to the header information in the frames of data from each port, without removing header information, in order to identify the port from which the data came; multiplexing the data from the plurality of ports into a single data stream for transmission by synchronous transmission medium. (column 11 line 25 - column 12 line 29)

- In reference to claim 10

In Figures 10 and 11, Dupont further teaches receiving data comprises receiving data from a plurality of Ethernet ports. (column 11 line 25 - column 12 line 29)

- In reference to claim 12

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In Figures 10 and 11, Dupont teaches a method that includes receiving framed data from a plurality of ports, each frame of data including header information; adding a customer port identifier to the header information in the frames of data from each port, without removing header information, in order to identify the port from which the data came; multiplexing the data from the plurality of ports into a single data stream for transmission by synchronous transmission medium wherein adding the unique port identifier comprises inserting the unique port identifier into a VLAN field of a tagged MAC frame of the data. (column 11 line 25 - column 12 line 29)

- In reference to claim 13

In Figures 10 and 11, Dupont further teaches converting the single serial data stream into SONET optical signals for transmission. (column 11 line 25 - column 12 line 29)

- In reference to claim 14

In Figures 10 and 11, Dupont further teaches a subscriber access multiplexer (62) operable to receive the single serial data stream from the multiplexer (62), demultiplex the serial data stream into data from each port, and route the data based on the customer port identifier. (column 11 line 25 - column 12 line 29)

- In reference to claim 15

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In Figures 10 and 11, Dupont further teaches a subscriber access multiplexer (62) operable to receive data from a plurality of sender nodes in a network and operable to insert the customer port identifier based on an IP address of the sender node of the data, and multiplex the data into a single serial data stream; the multiplexer (62) being operable to receive the single serial data stream from the subscriber access multiplexer (62) and demultiplex the data; and the switch (70) being operable to switch the demultiplexed data based on the customer port identifier to the plurality of ports. (column 11 line 25 - column 12 line 29)

- In reference to claim 16

In Figures 10 and 11, Dupont further teaches a subscriber access multiplexer (62) operable to receive the single serial data stream from the multiplexer (62) and route the data to a destination network node based on the customer port identifier, a MAC address and IP address in the data. (column 11 line 25 - column 12 line 29)

Allowable Subject Matter

Claim 6 is allowed.

Claims 7-8, 18-19 and 21-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 07/15/2008 with regard to claims 1, 11, and 17 have been fully considered and are persuasive. The rejection has been withdrawn.

Applicant's arguments filed 07/15/2008 with regard to independent claim 9 have been fully considered but they are not persuasive.

- In the Remarks on pg. 3 of the Amendment, the Applicant contends that Dupont does not suggest that the Ethernet switch is handling the VLAN tagging.
- In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the Ethernet switch is handling the VLAN tagging) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- In the Remarks on pg. 3 of the Amendment, the Applicant contends that Dupont does not suggest multiplexing into a single data stream for transmission on the synchronous transmission medium. The Applicant contends that different customer flows are maintained on different virtual channels between the Ethernet switch and separate RPEs in the SONET/SDH equipment, each of which then separately formats the

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packets for transmission along separate virtual channels on the optical loop 10, and ultimately to separate destinations.

- The Examiner respectfully disagrees that Dupont does not suggest multiplexing into a single data stream for transmission on the synchronous transmission medium. The SONET/SDH equipment (62) transmits each virtual channel on the same physical optical loop (10). (column 5 lines 40-53) Hence, the data is multiplexed into a single data stream for transmission on the synchronous transmission medium.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN ROBERTS whose telephone number is (571)272-3095. The examiner can normally be reached on M-F 10:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSR
10/15/2008

/Wing F. Chan/
Supervisory Patent Examiner, Art Unit 2619
10/23/08